

INCIDENT LIGHT

120

LIQUID CRYSTAL LAYER 117

OPPOSITE SUBSTRATE 119

OPPOSITE ELECTRODE 118

ORIENTATED LAYER 116

PIXEL ELECTRODE (TRANSPARENT CONDUCTIVE LAYER) 113

121

115 114 115 114 115 114 115 114

112 INTERLAYER INSULATING FILM

111 SWITCHING ELEMENT

110 SUBSTRATE



2/22

FIG. 2A

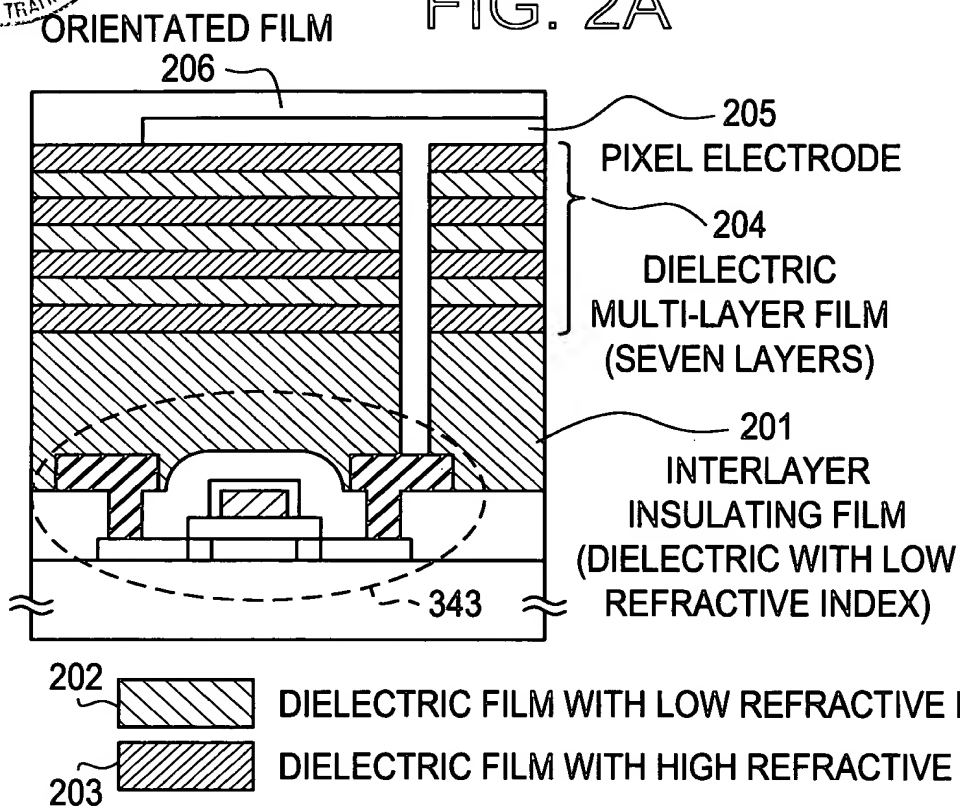
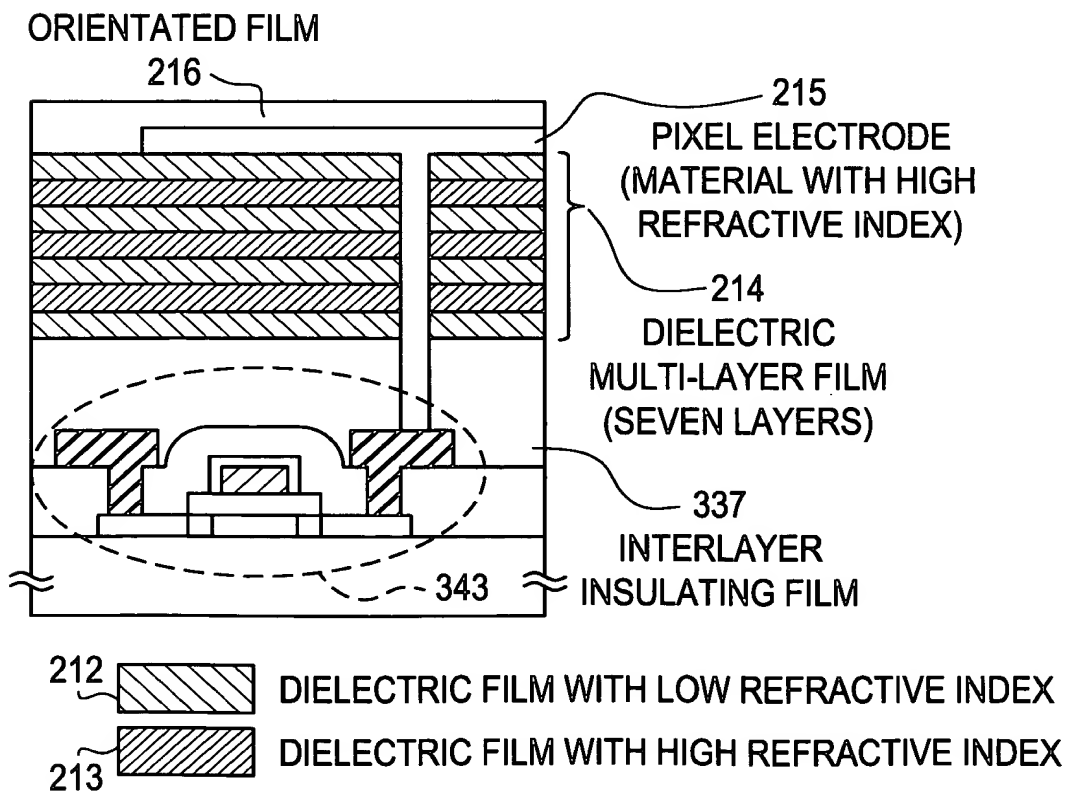
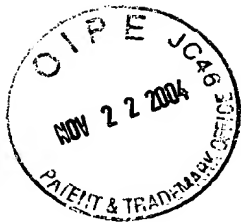


FIG. 2B





3/22

FIG. 3A

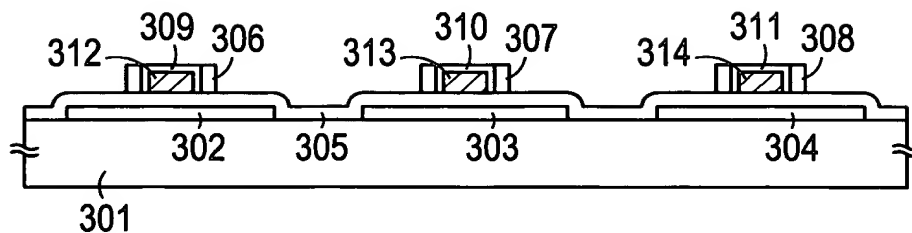


FIG. 3B

ADDITION OF P OR B ION

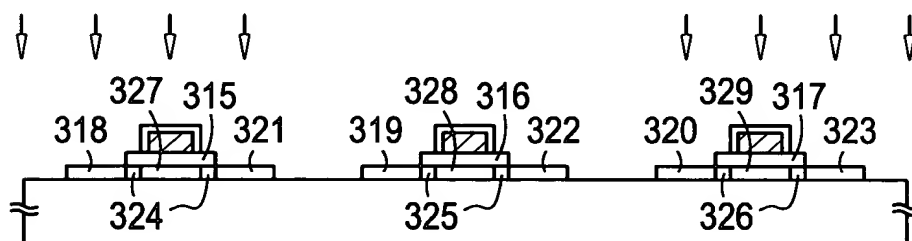
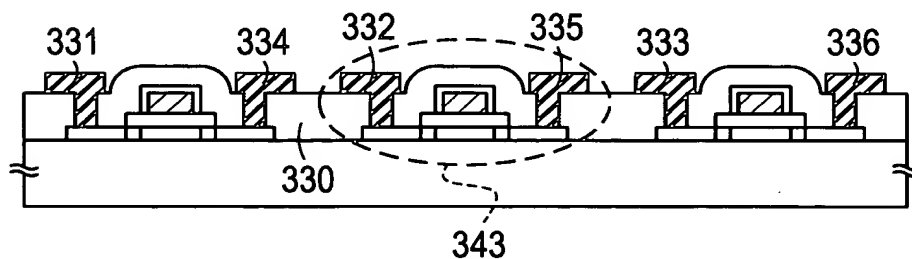
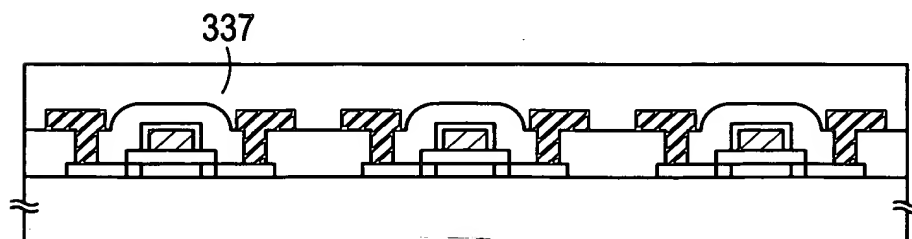


FIG. 3C



SWITCHING ELEMENT

FIG. 3D





4/22

FIG. 4A

STEP OF FORMING DIELECTRIC MULTI-LAYER FILM

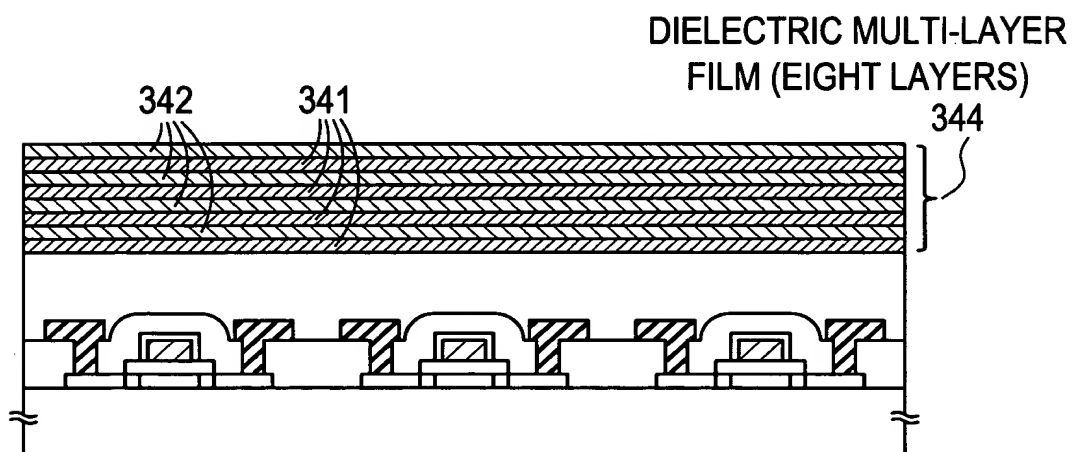


FIG. 4B

STEP OF FORMING CONTACT HOLE

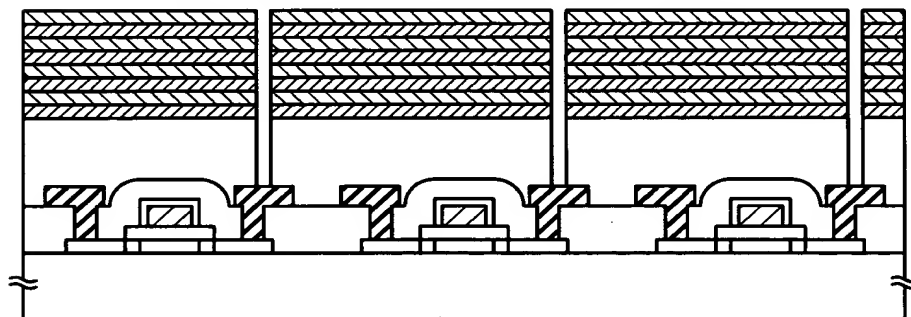
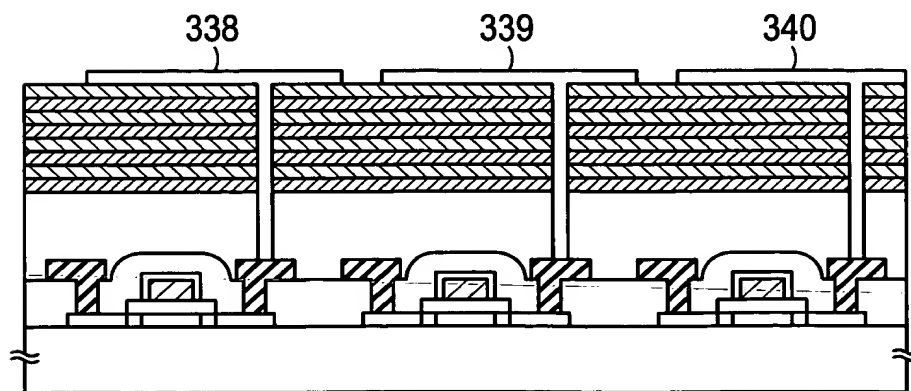


FIG. 4C

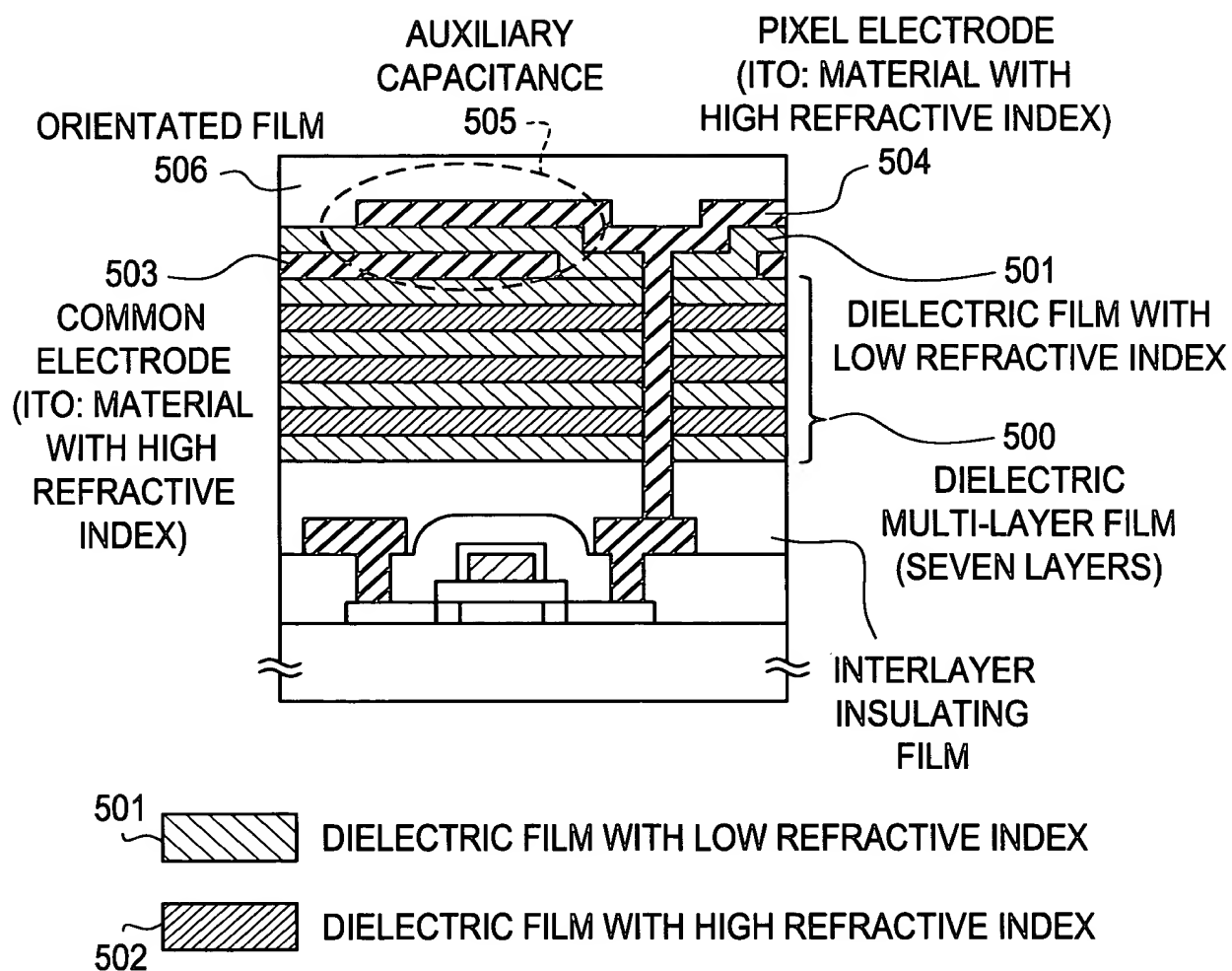
STEP OF FORMING PIXEL ELECTRODE





5/22

FIG. 5





6/22

FIG. 6A

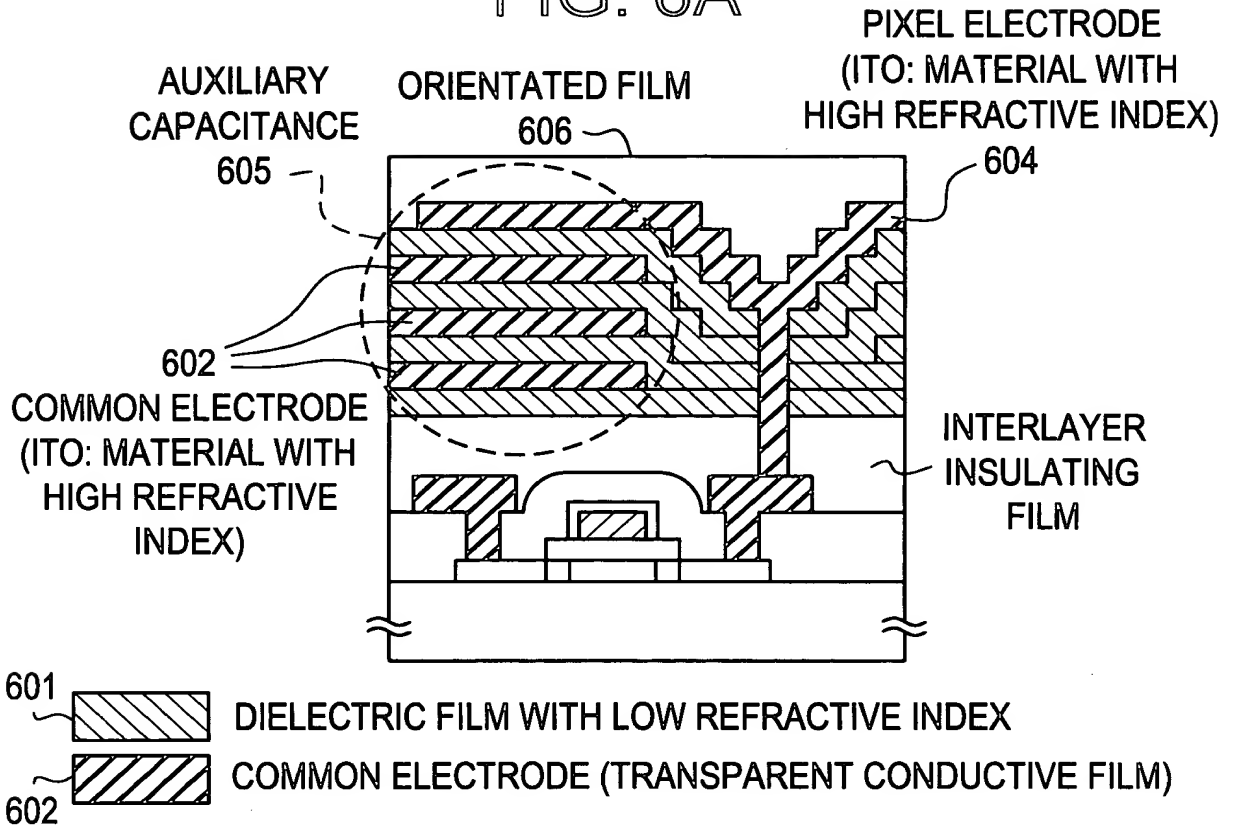


FIG. 6B

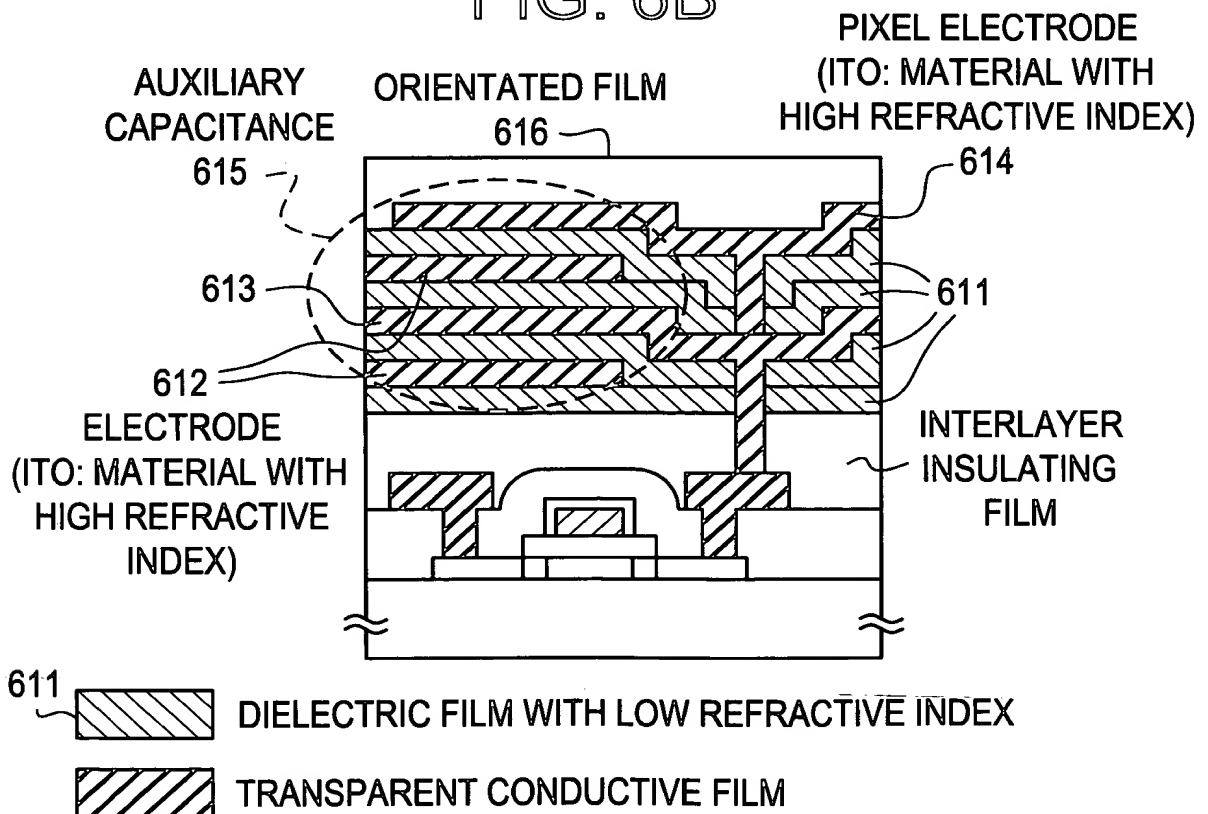
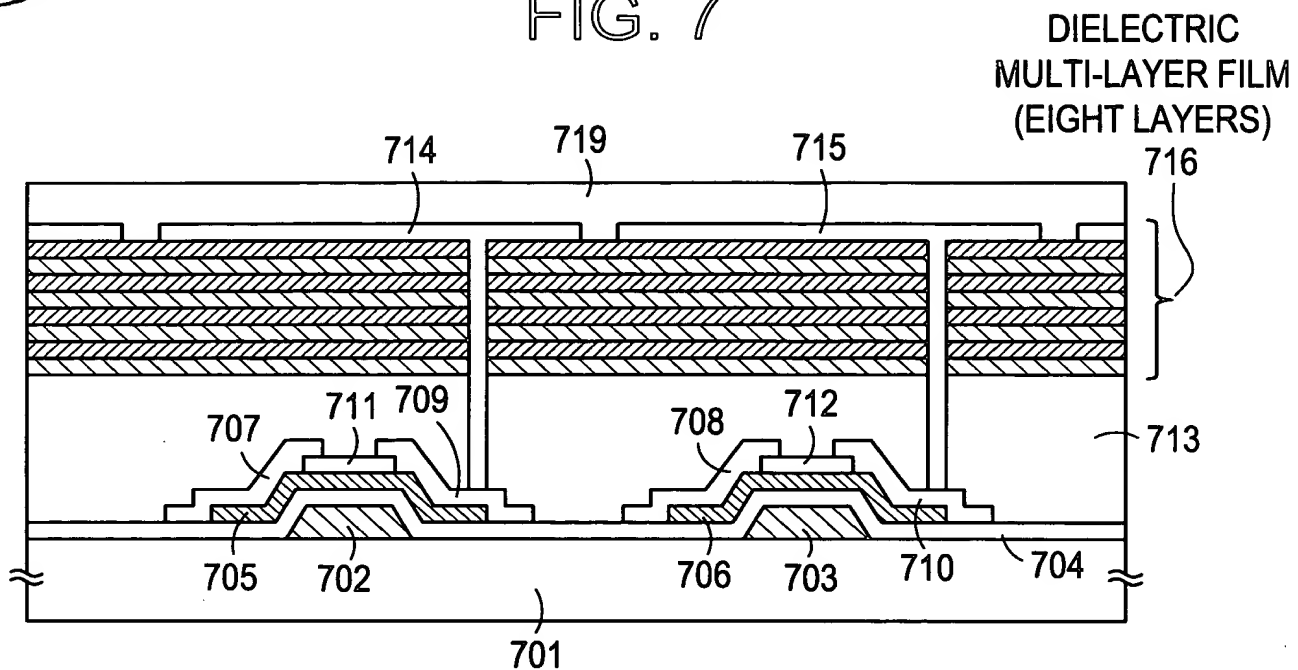
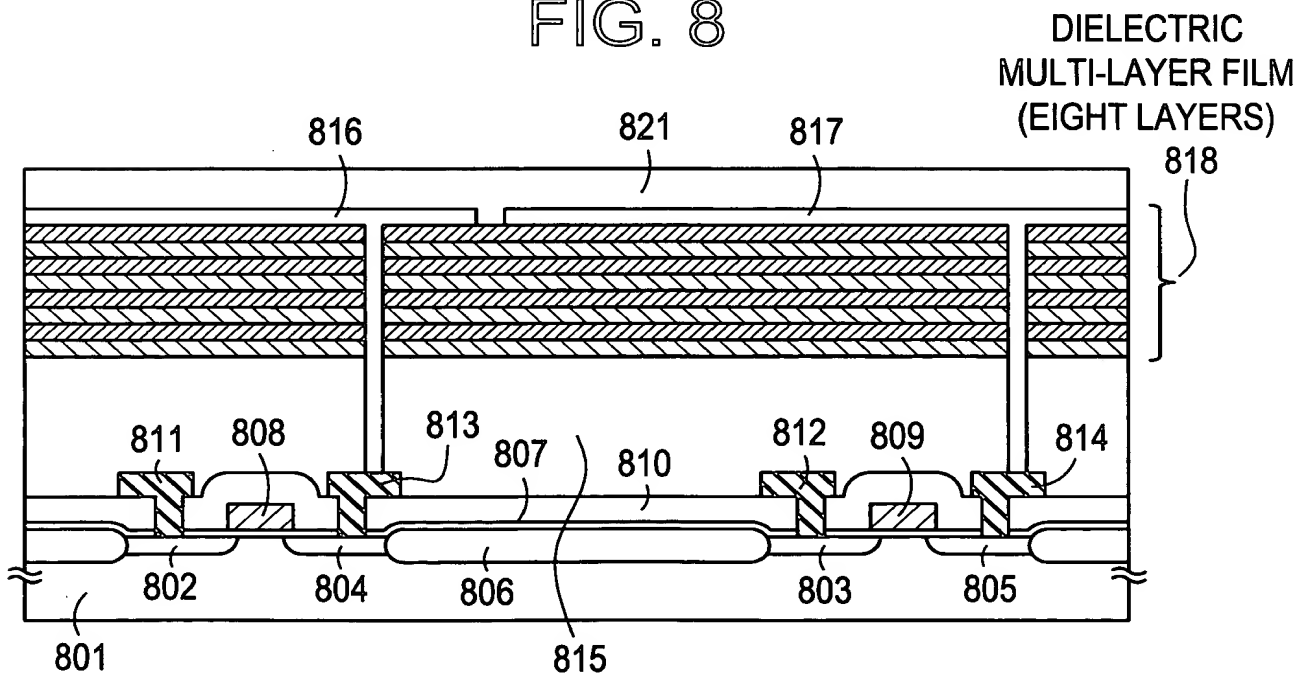


FIG. 7



717 ~ DIELECTRIC FILM WITH LOW REFRACTIVE INDEX
 718 ~ DIELECTRIC FILM WITH HIGH REFRACTIVE INDEX

FIG. 8

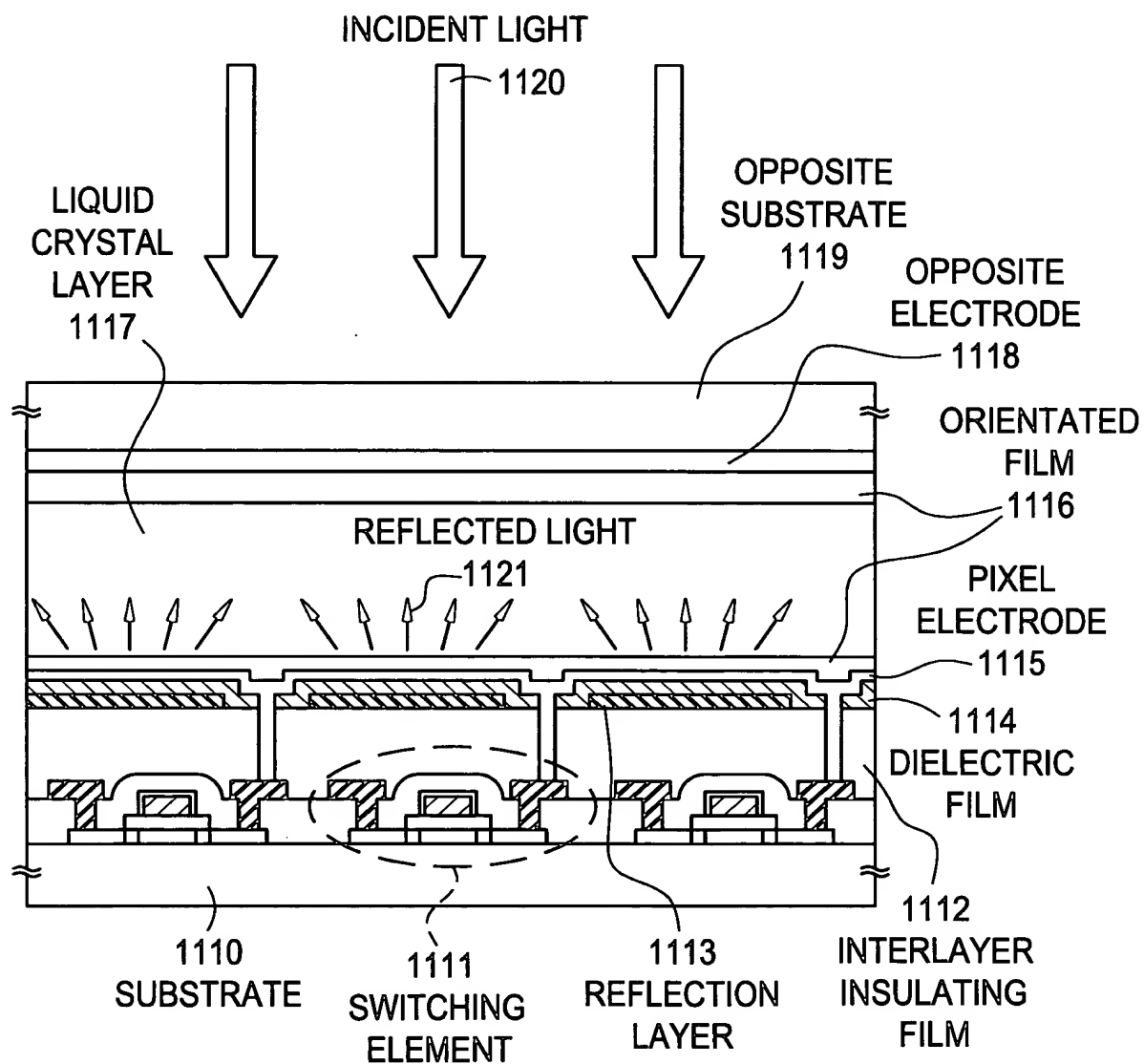


819 ~ DIELECTRIC FILM WITH LOW REFRACTIVE INDEX
 820 ~ DIELECTRIC FILM WITH HIGH REFRACTIVE INDEX



8/22

FIG. 9





9/22

FIG. 10A

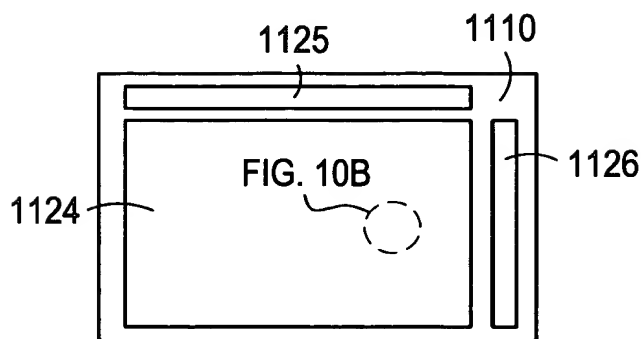
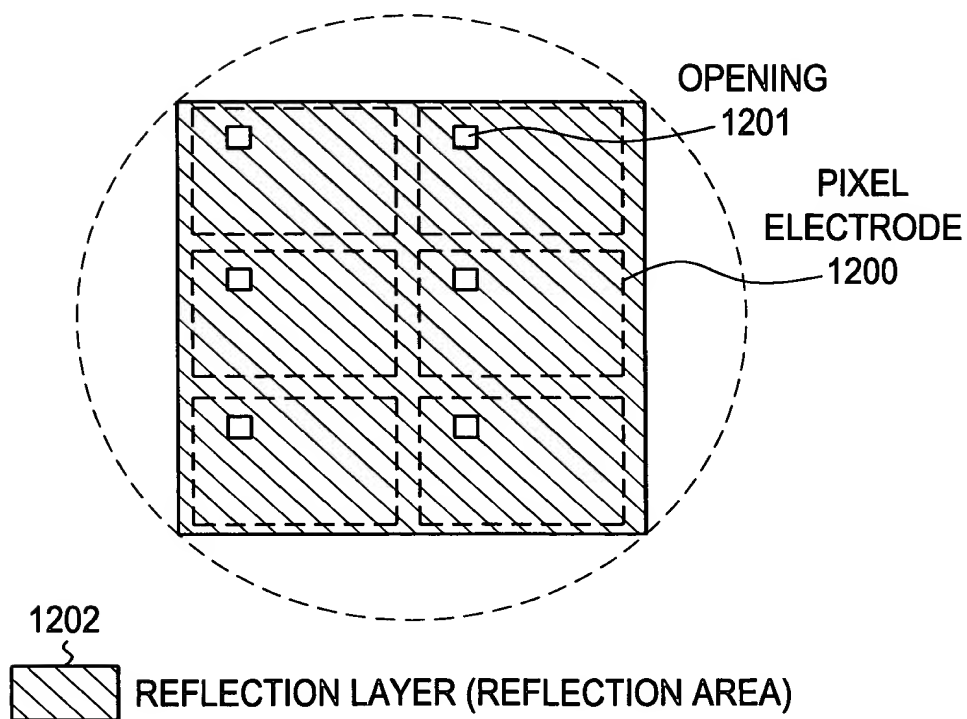


FIG. 10B





10/22

FIG. 11A

STEP OF FORMING REFLECTION LAYER AND DIELECTRIC FILM

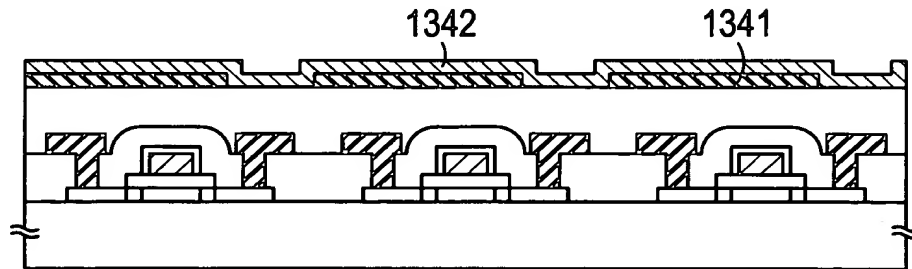


FIG. 11B

STEP OF FORMING CONTACT HOLE

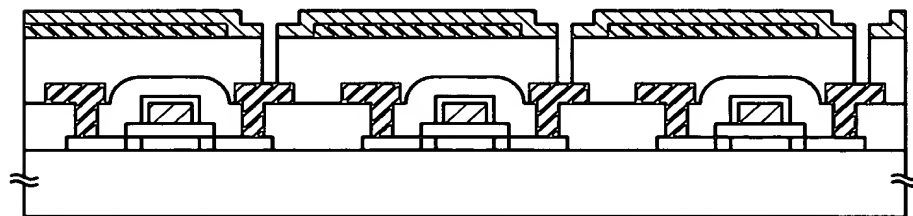
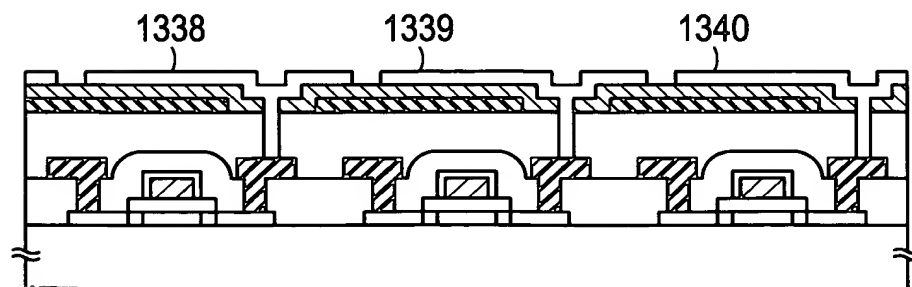


FIG. 11C

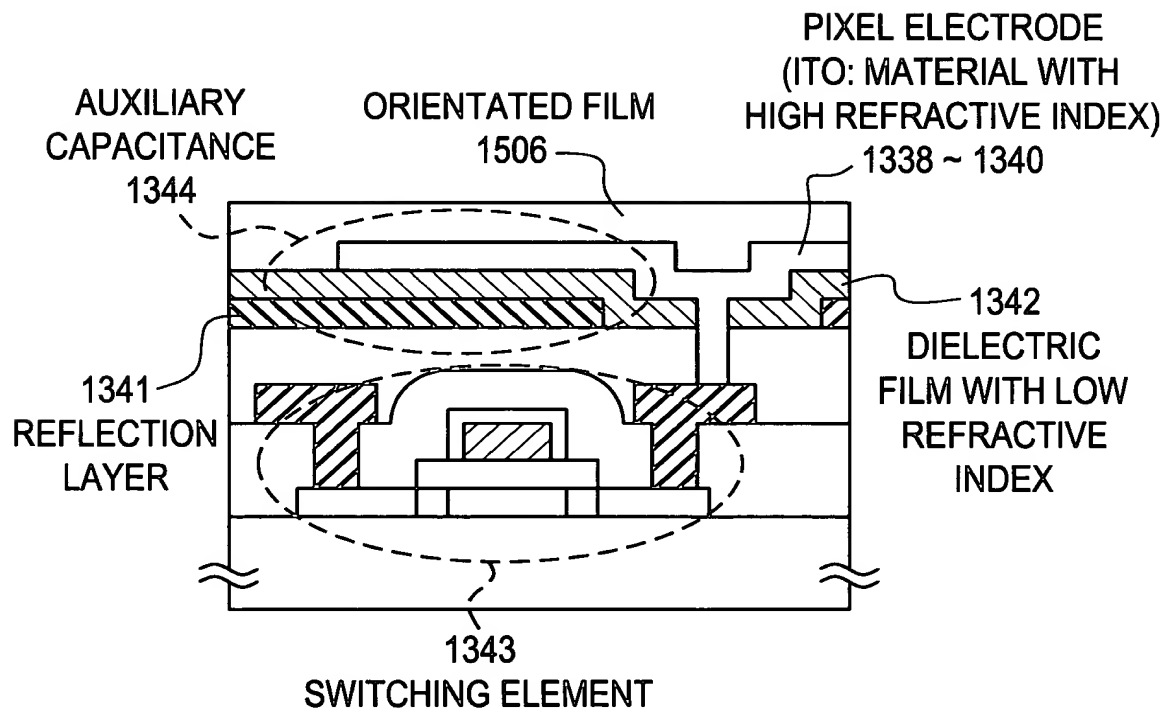
STEP OF FORMING PIXEL ELECTRODE





11/22

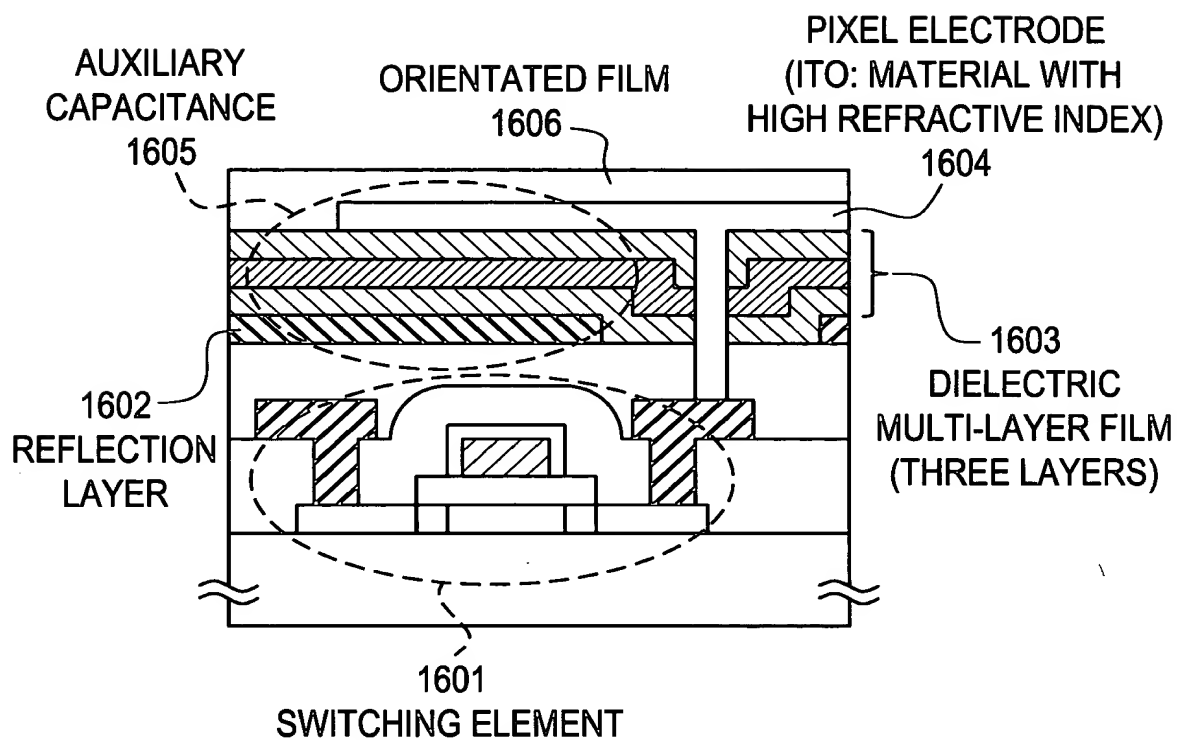
FIG. 12





12/22

FIG. 13

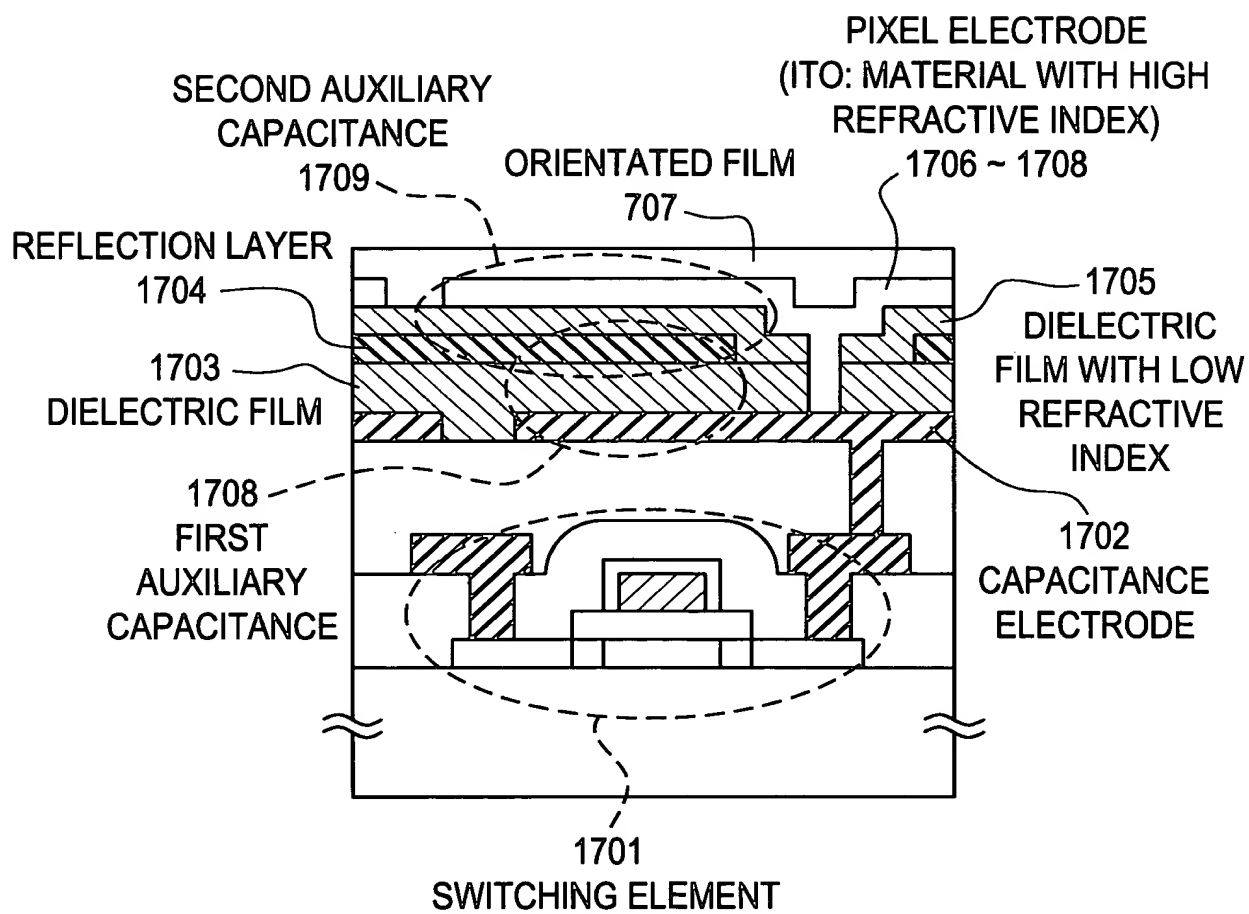


DIELECTRIC FILM WITH LOW REFRACTIVE INDEX



DIELECTRIC FILM WITH HIGH REFRACTIVE INDEX

FIG. 14





14/22

FIG. 15A

STEP OF FORMING CAPACITANCE ELECTRODE 1702 AND DIELECTRIC FILM 1703

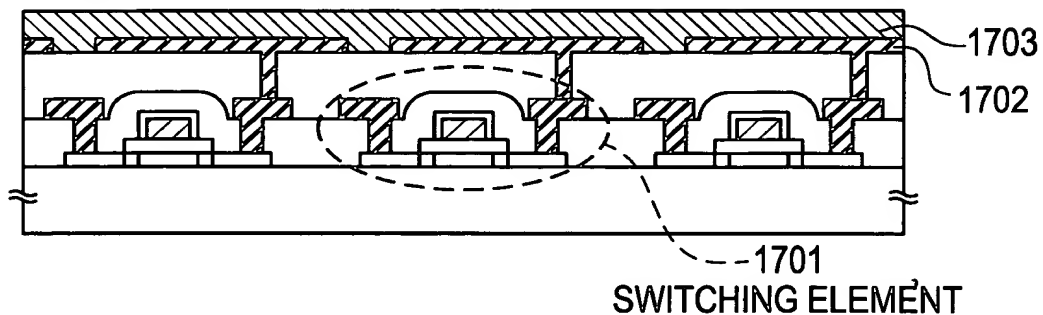


FIG. 15B

STEP OF FORMING REFLECTION LAYER 1704 AND DIELECTRIC FILM 1705

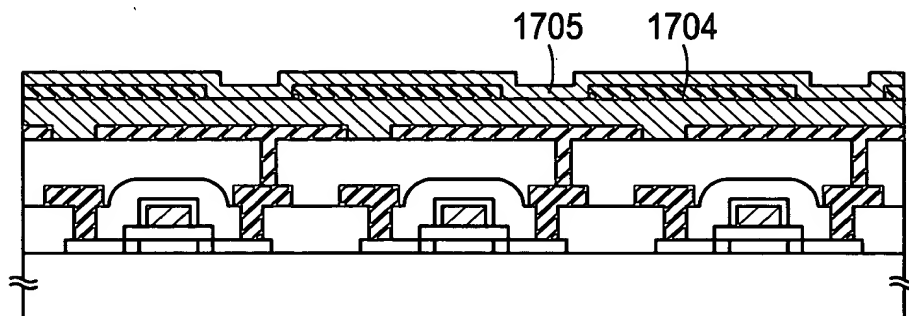


FIG. 15C

STEP OF FORMING CONTACT HOLE

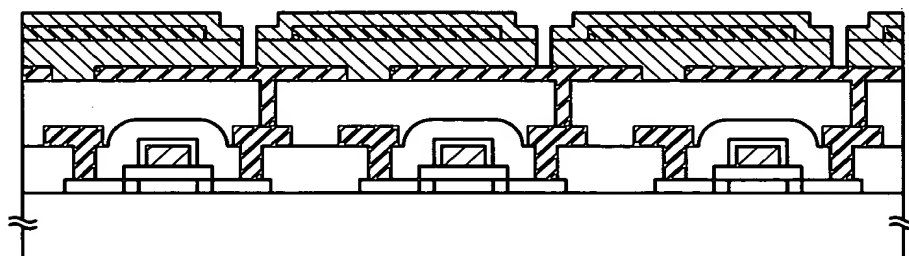
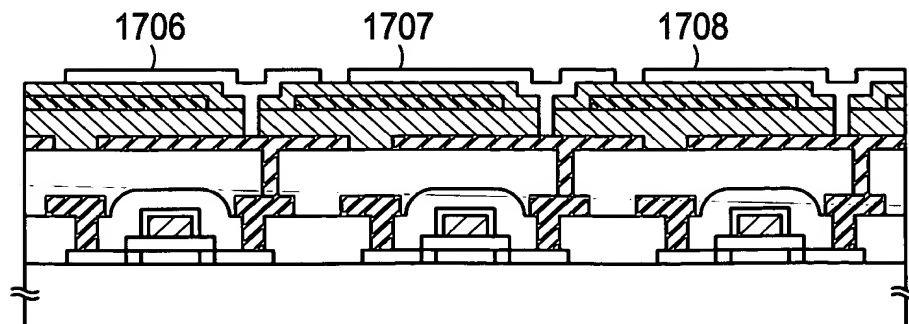
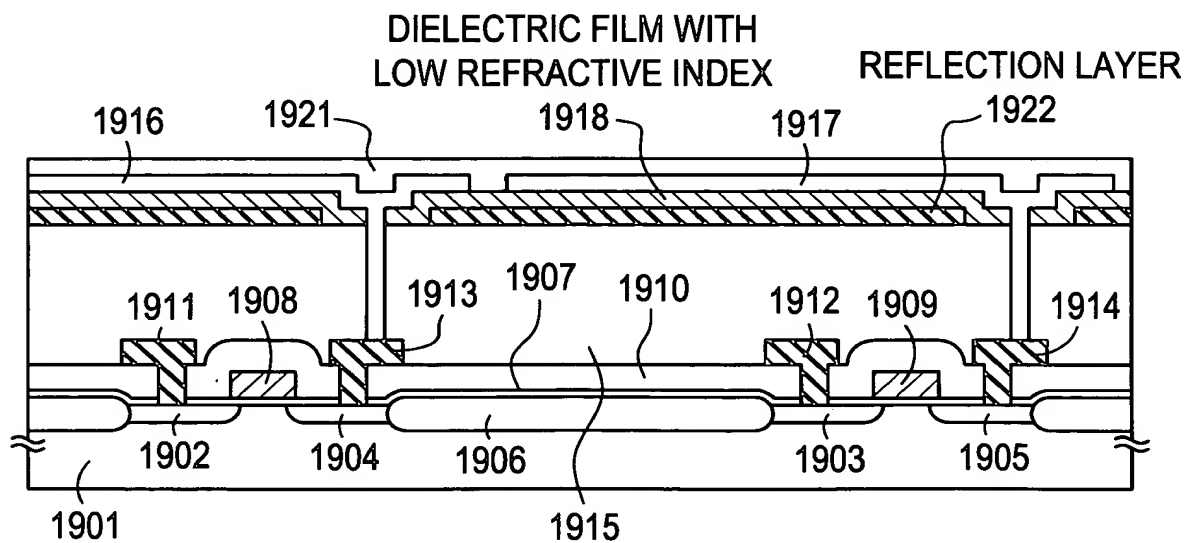


FIG. 15D

STEP OF FORMING PIXEL ELECTRODES 1706 ~ 1708







16/22

FIG. 18A

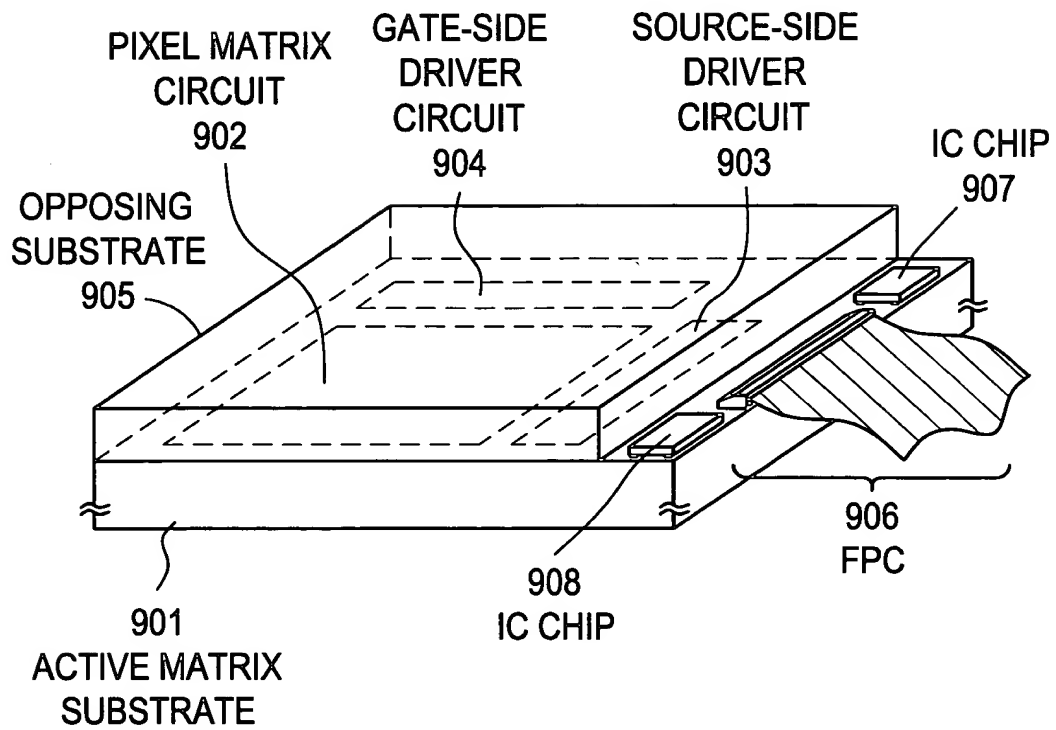
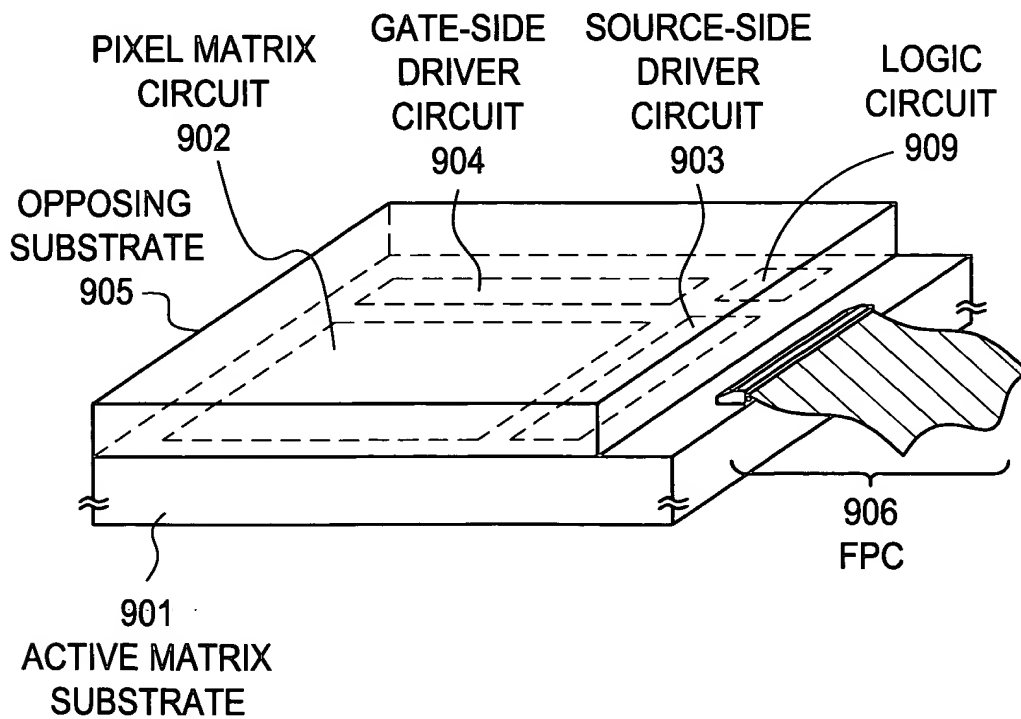


FIG. 18B





17/22

FIG. 19A

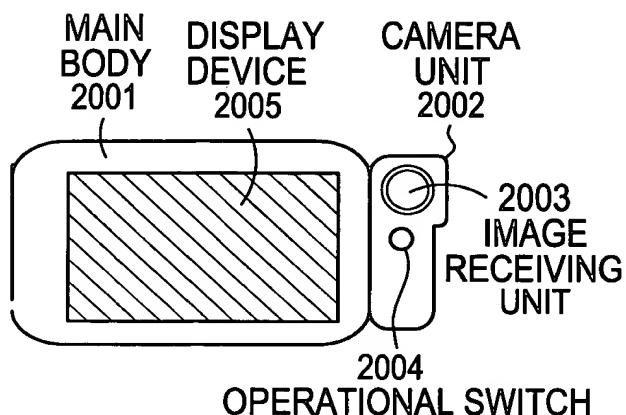


FIG. 19B

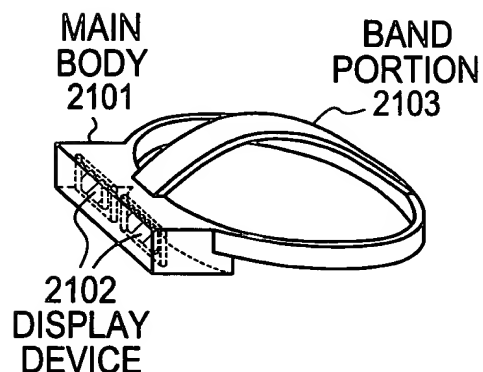


FIG. 19C

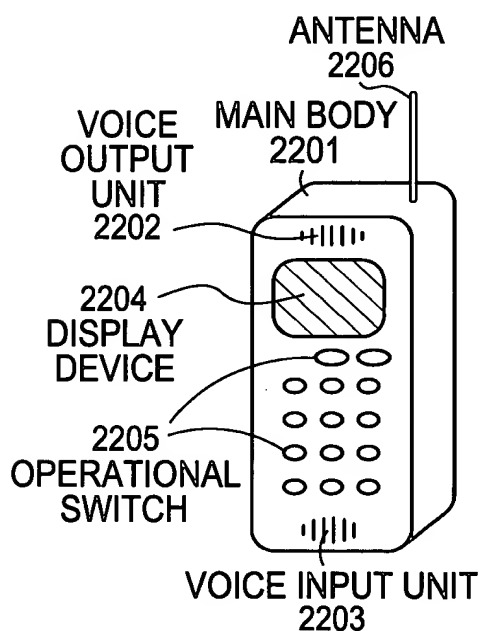


FIG. 19D

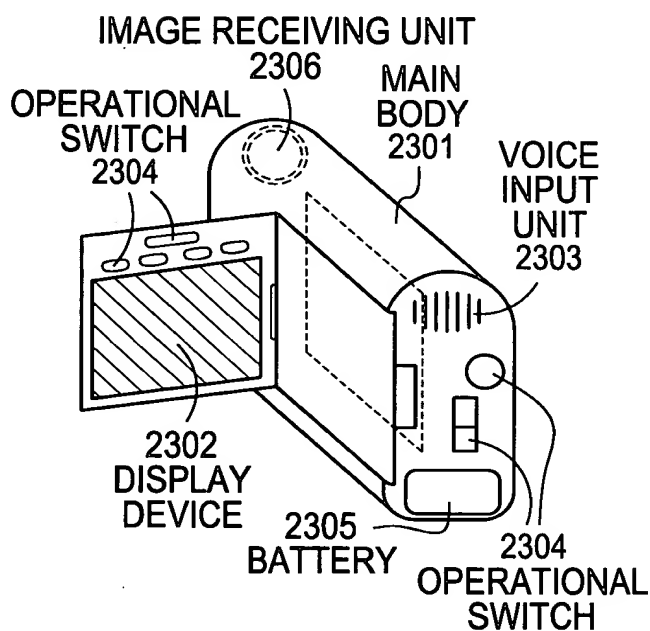


FIG. 19E

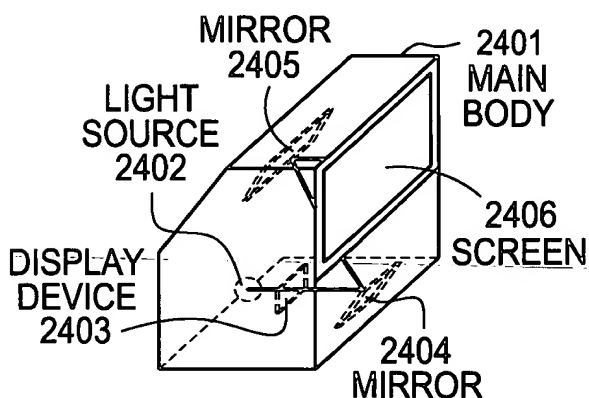
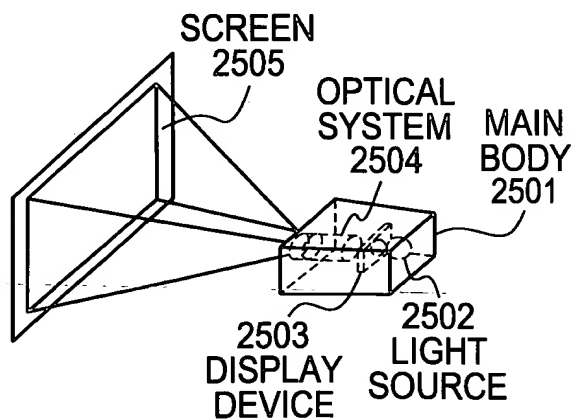


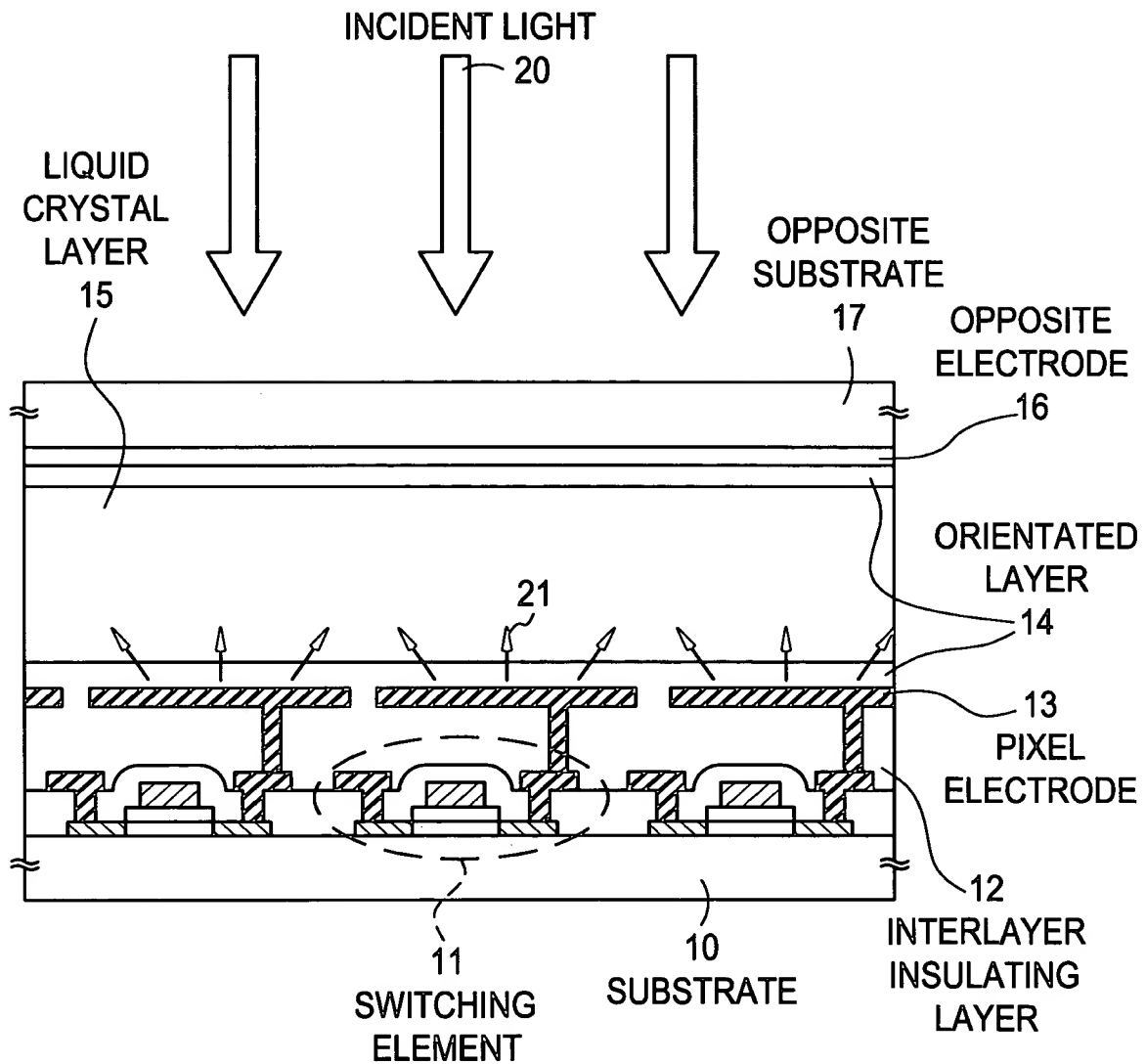
FIG. 19F





18/22

FIG. 20
PRIOR ART





19/22

FIG. 21A
PRIOR ART

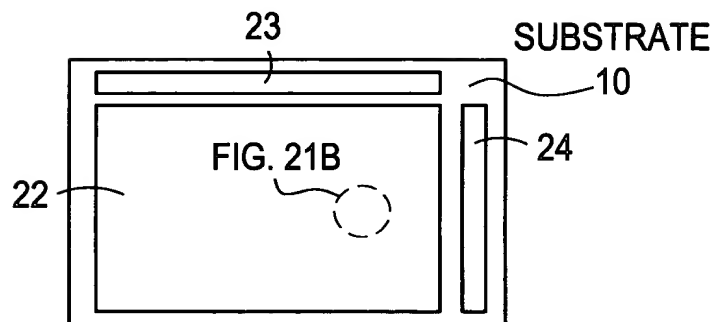
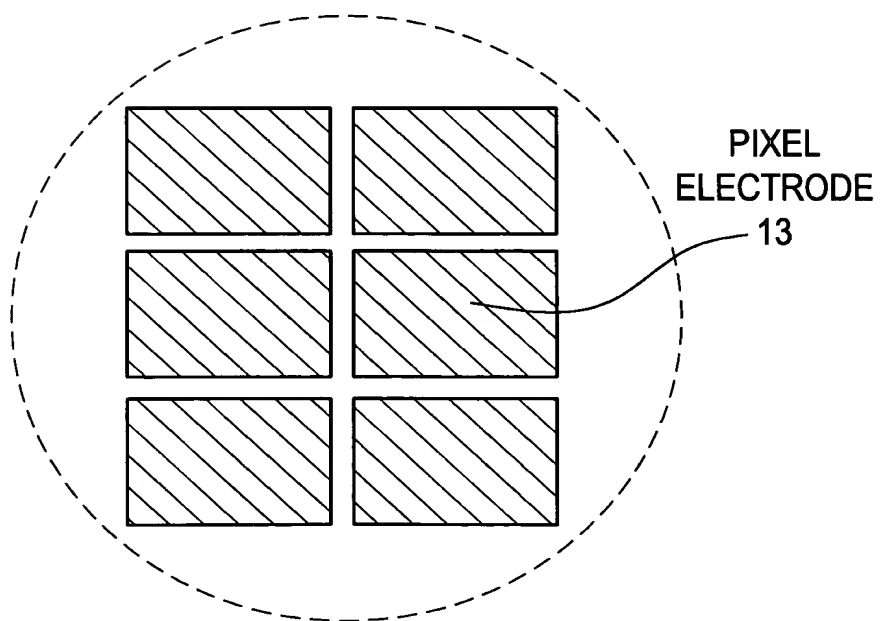


FIG. 21B
PRIOR ART





20/22

FIG. 22A

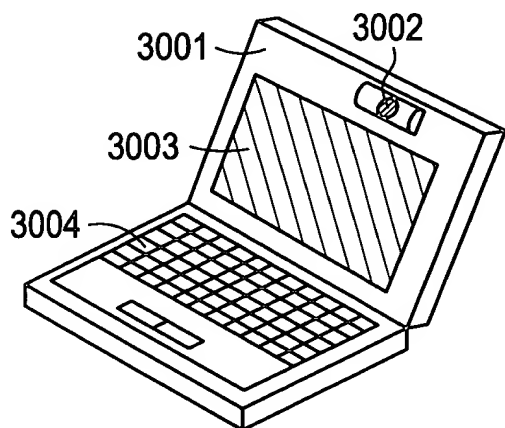


FIG. 22B

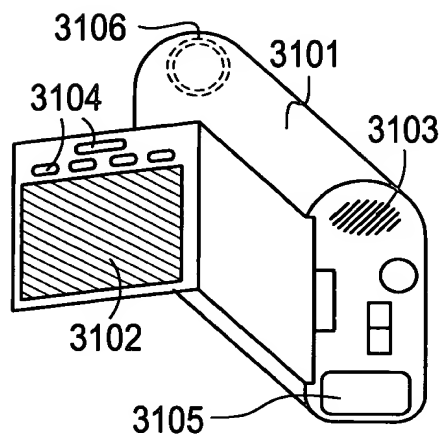


FIG. 22C

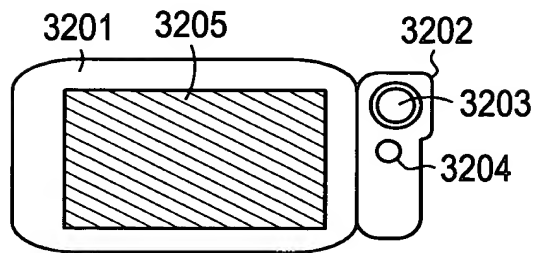


FIG. 22D

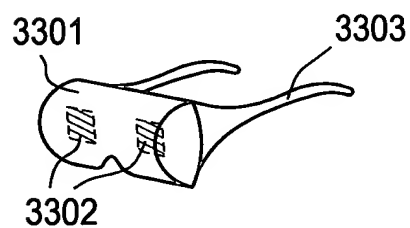


FIG. 22E

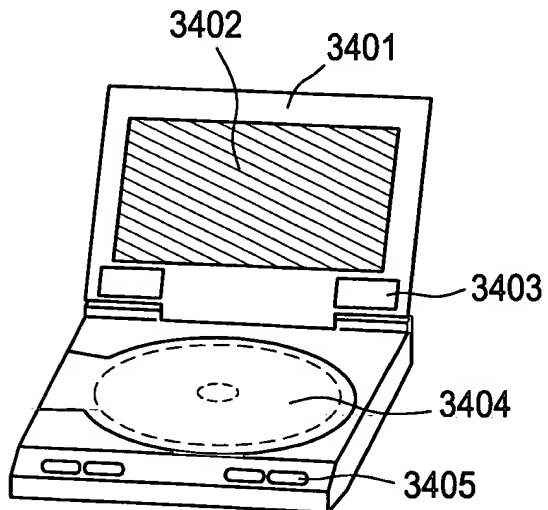
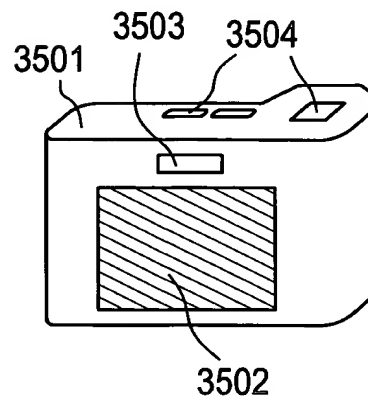


FIG. 22F





21/22

FIG. 23A

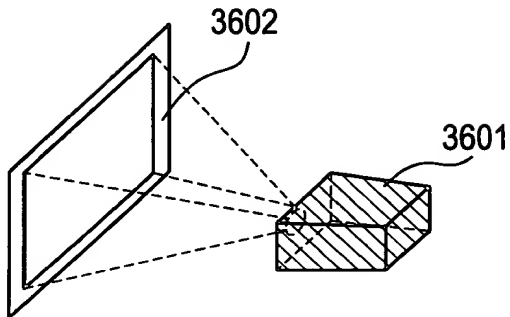


FIG. 23B

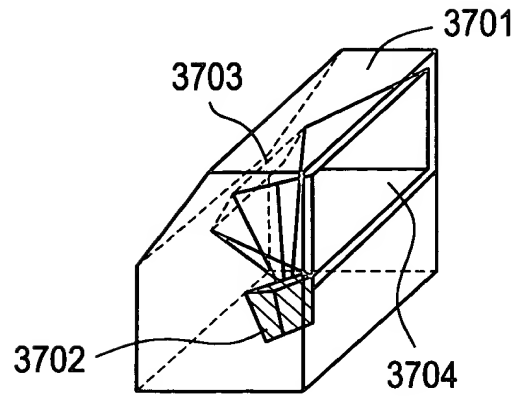


FIG. 23C

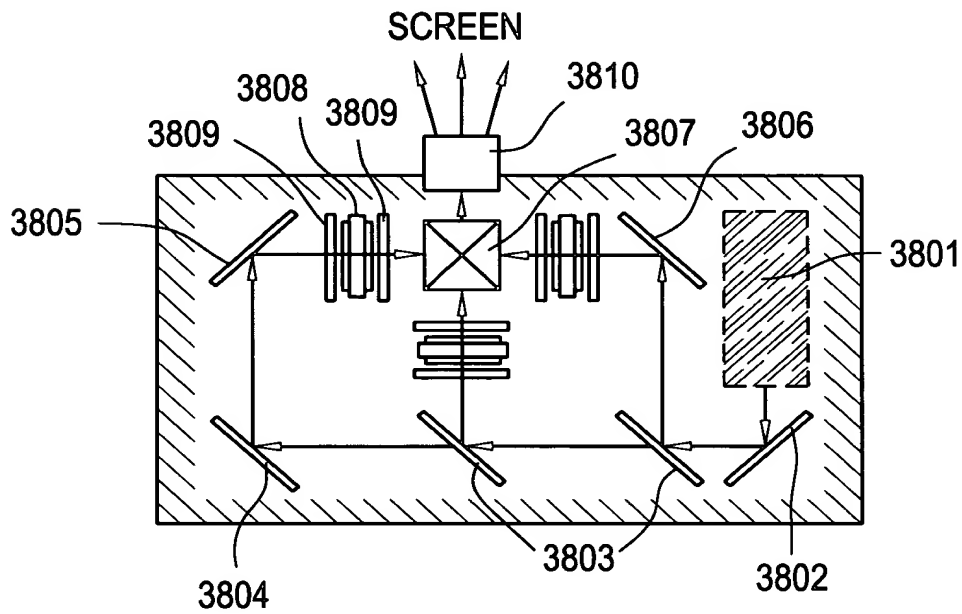


FIG. 23D

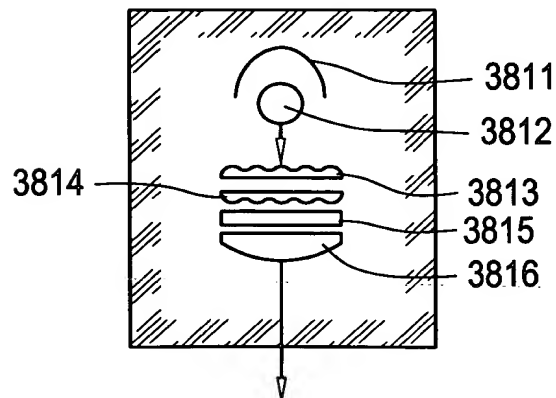


FIG. 24A

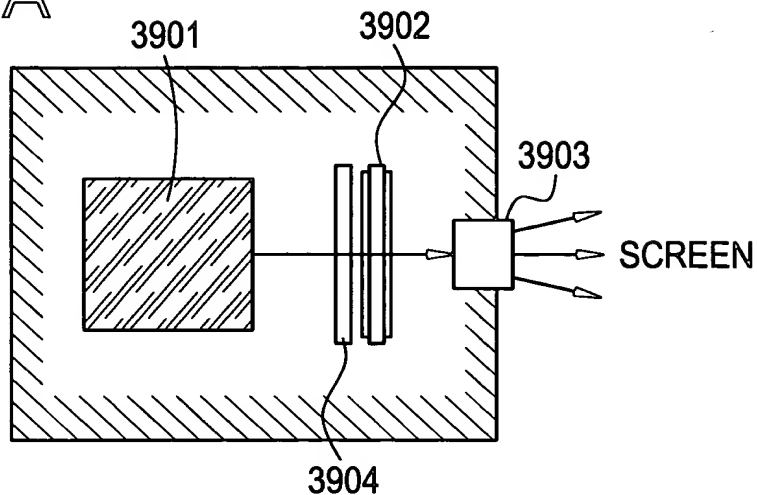


FIG. 24B

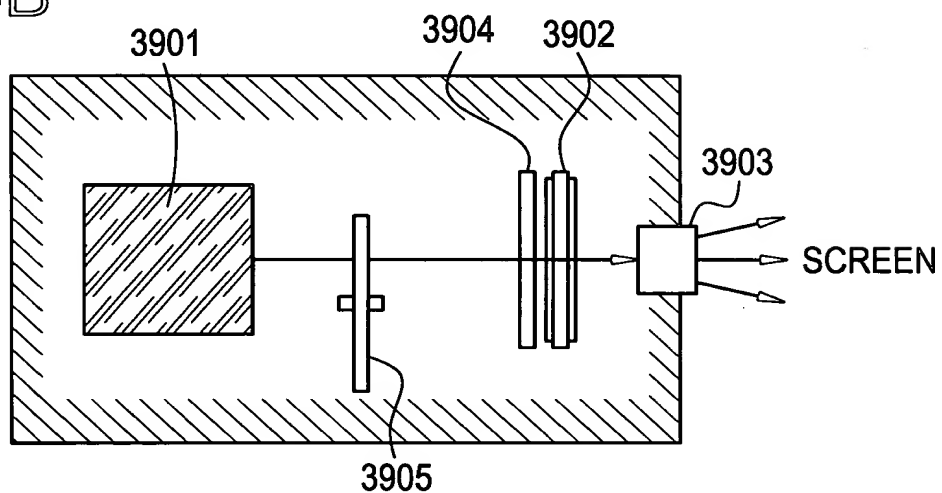


FIG. 24C

